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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,345	06/25/2001	Akiko Hemmi	41935	9024
1609	7590 06/04/2003			
ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P. 1300 19TH STREET, N.W. SUITE 600			EXAMINER	
			MRUK, BRIAN P	
WASHINGTON,, DC 20036			ART UNIT	PAPER NUMBER
			1751	
			DATE MAIL ED: 06/04/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Anti-ou Commence	09/887,345	HEMMI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Brian P Mruk	1751				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on <u>10</u>	October 2002					
	his action is non-final.					
3) Since this application is in condition for allow		osecution as to the merits is				
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>						
4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-19</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documen	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)				

Application/Control Number: 09/887,345

Art Unit: 1751

## **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hughes et al, EP 398,724.

Hughes et al, EP 398,724, discloses a process for preparing a water soluble copolymer comprising establishing an initial charge of water, gradually adding 3-65% by weight of a monoethylenically unsaturated dicarboxylic acid containing 4-6 carbon atoms and 35-97% by weight of a monoethylenically unsaturated monocarboxylic acid containing 3-6 carbon atoms, adding a metal salt activator, running the reaction, and recovering the copolymer (see page 3, lines 30-48), per the requirements of the instant invention. It is further taught by Hughes et al that the process for preparing the copolymer includes the step of including a water-soluble initiator system comprising a

Application/Control Number: 09/887,345

Art Unit: 1751

combination of hydrogen peroxide and sodium persulfate in an amount of 0.5-20% by weight (see page 5, lines 10-20). Specifically, note Examples 1-3, 5, 7, 22-38 and 41. Furthermore, note that the resulting copolymer in Example 1 has a molecular weight of 11,900, a solids content of 39.5%, and a 3-dispersion degree of 2.76, per the requirements of instant claims 3-8, and that Hughes et al discloses that the copolymer is used as an antiscalant, a dispersant, and a detergent (see page 2, lines 7-11), per the requirements of instant claims 11-19. Therefore, instant claims 1-19 are anticipated by Hughes et al, EP 398,724.

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Mruk whose telephone number is (703) 305-0728. The examiner can normally be reached on Monday-Thursday from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (Before Final) and (703) 872-9311 (After Final).

Application/Control Number: 09/887,345

Art Unit: 1751

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

BIM Brian Mruk June 2, 2003

> Brian P. Mruk Patent Examiner Tech Center 1700

Brion P. Mule